

Water aerobics for the elderly has been gaining momentum and growing numbers of fans, so much so that in the last 10 years the popularity of exercise in the aquatic environment has increased significantly.

Conclusion: With the present study it can be verified that the hydrogymnastic presents numerous benefits for maintenance and prevention of osteoporosis in the elderly. Regular practice of water aerobics contributes to good body health, as well as providing physical and mental well-being and social interaction among its practitioners. This study may provide important health professionals with knowledge about the importance of encouraging and intensifying regular physical exercise, including hydrogymnastics, as one of the determinants of elderly health promotion.

REFERENCES

- [1] Teixeira CS, Lemos FFC, Lopes LFD, Rossi AG, Mota CB. Corporal balance and physical exercises: an investigation in elderly women who practice different exercise modalities. *Acta Fisiátrica*. 2008;15(3):156-159.
- [2] Kemper, C., Oliveira, R. J. D., Bottaro, M., Moreno, R., Bezerra, L. M. A., Guido, M., & França, N. M. D. Effects of swimming and resistance training on bone mineral density of older women. *Revista Brasileira de Medicina do Esporte*. 2009;15(1):10-13.

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AB1362-HPR THE EFFECTS OF 4 – WEEK REHABILITATION PROGRAM ON PATIENT OUTCOMES IN PATIENTS WITH KNEE OSTEOARTHRITIS

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Background: Osteoarthritis (OA) is the most common form of arthritis and a major cause of pain and disability in older adults (1). Older adults with knee OA report lower physical functioning and increased difficulty in performing activities of daily living compared with older adults without knee OA (2). Knee OA treatment aims to improve physical functions, quality of life, prevent disability, and decrease pain. Therapeutic exercises and physiotherapy treatment applications are recommended for the patients with knee OA (3).

Objectives: The purpose of this study was to examine the effects of 4 week physiotherapy and rehabilitation program on range of motion, balance, knee swelling, and activities of daily life, quality of life, and functional status in patients with knee osteoarthritis. It was hypothesized that 4 – week rehabilitation program might provide improvements in measurements of the patient outcomes in patients with knee osteoarthritis.

Methods: Twenty-seven healthy subjects were participated in the study. Subjects had no surgery history of lower extremity. Range of motion, balance, knee swelling, activities of daily life, quality of life, and functional status were assessed by Goniometer, Berg Balance Test, Tape measure, Barthel Index, WHOQL Scale, WOMAC Scale, respectively. The physiotherapy and rehabilitation program started after the first assessment and was applied as 20 sessions for a total of four weeks, five sessions per week. All of the assessments procedures were performed again after the treatment.

Results: There were statistically significant improvements in measures of range of motion, balance, knee swelling, and functional status between pre- and post – treatment ($p < 0.05$). However, no significant difference was found in activities of daily life and quality of life after the 4-week rehabilitation program ($p > 0.05$).

Conclusion: Based on our findings, short-term effects of physiotherapy and rehabilitation program may be beneficial on range of motion, balance, knee swelling, and functional status in patients with knee osteoarthritis. However, 4-week rehabilitation program has no effect on activities of daily life and quality of life in patients with knee osteoarthritis.

REFERENCES

- [1] Huang L, Guo B, Xu F, Zhao J. Effects of quadriceps functional exercise with isometric contraction in the treatment of knee osteoarthritis. *Int J Rheum Dis*. 2018 May;21(5):952-959.
- [2] Mihalko SL, Cox P, Beavers DP, et al. Effect of intensive diet and exercise on self-efficacy in overweight and obese adults with knee osteoarthritis: The IDEA randomized clinical trial. *Transl Behav Med*. 2018 Apr 4.

- [3] Aydoğdu O, Sari Z, Yurdalan SU, Polat MG. Clinical outcomes of kinesio taping applied in patients with knee osteoarthritis: A randomized controlled trial. *J Back Musculoskelet Rehabil*. 2017 Sep 22;30(5):1045-1051.

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AB1363-HPR THE INVESTIGATION OF THE QUALITY OF LIFE AND FUNCTIONAL ABILITIES IN PATIENTS WITH JUVENILE SCLERODERMA

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Background: Juvenile scleroderma (JS) is a rarely seen chronic connective tissue disorder. There are two main disease forms: juvenile localized scleroderma (JLS) and juvenile systemic sclerosis (JSS). These conditions share common pathophysiologic features which are mainly characterized by inflammation and fibrosis of the skin. In JLS, fibrosis involves restricted areas of the skin, whereas in JSS it also affects the internal organs.

Objectives: There have been few studies of quality of life in pediatric scleroderma and these focused predominantly on self-perception and the influence of skin involvement. Our cross-sectional study aimed to describe the influence of juvenile scleroderma on functional ability and quality of life in relation to clinical and demographic measures.

Methods: 30 patients (26 girls, 4 boys) with JS between the ages of 6-18 years and 30 healthy controls (20 girls, 10 boys) with similar age and gender were included in our study. Patients with either localized scleroderma or systemic sclerosis (SSc) attending pediatric rheumatology clinics, together with their parents were asked to complete a set of 3 validated measures. Children completed their functional ability status with Childhood Health Assessment Questionnaire (CHAQ) and Jebson Taylor Hand Function Test (JTHFT). The quality of life were evaluated with Scleroderma Health Assessment Questionnaire (SHAQ). Clinical and demographic data were provided by consultant pediatric rheumatologists and physiotherapists.

Results: The mean age of the JS group was 14.06 ± 3.24 years (86% female, 14% male; while the % 53 localized scleroderma, %47 SSc) and of the control group was 12.43 ± 3.24 years. There were significant differences between the two groups in functional ability scores (JTHFT), (CHAQ) and quality of life scores (SHAQ) ($p < 0.05$). In JS group, the total-CHAQ score was 0.47 ± 0.63 (range 0–3, 0 indicating no impairment), the JTHFT-Total left hand and right hand scores were 44.05 ± 9.83 and 41.49 ± 7.42 second respectively, and the median SHAQ-Total score was 0,34 (range 0–6, 0 indicating no impairment).

Conclusion: Functional ability disabilities in JS patients cause limitations in daily living activity. Scleroderma had only a moderate effect on quality of life and functional abilities as measured by the 3 validated instruments. Although a small number of children reported greater impairment, this is an encouraging finding, given its potential disfiguring and debilitating effects.

REFERENCES

- [1] Lam C, Young N, Marwaha J, McLimont M, Feldman BM. Revised versions of the Childhood Health Assessment Questionnaire (CHAQ) are more sensitive and suffer less from a ceiling effect. *Arthritis Care Res*. 2004; 51(6):881-9.
- [2] Reedman SE, Beagley S, Sakzewski L, Boyd RN. The Jebson Taylor Test of Hand Function: A Pilot Test-Retest Reliability Study in Typically Developing Children. *Phys Occup Ther Pediatr*. 2016; 36(3):292-304.
- [3] Rocha, L. F., Marangoni, R. G., Sampaio-Barros, P. D., Levy-Neto, M., Yoshinari, N. H., Bonfa, E., ... & Kowalski, S. C. Cross-cultural adaptation and validation of the Brazilian version of the Scleroderma Health Assessment Questionnaire (SHAQ). *Clinical rheumatology*. 2014; 33(5):699-706.

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